



# Analytical Laboratory

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13339 Hagers Ferry Road  
Huntersville, NC 28078-7929  
McGuire Nuclear Complex - MG03A2  
Phone: 980-875-5245 Fax: 980-875-4349

## Order Summary Report

**Order Number:** J13030033

Project Name: NPDES - QUARTERLY

Customer Name(s): Craig Mercer, Mark J Harper, Todd Spade, Tara Thomas, Matthew Hoyt, Michael

Customer Address: 11021 BROWER RD.

NORTH BEND, OH 45052

Lab Contact: Mary Ann Ogle

Phone: 980-875-5274

**Report Authorized By:**  
(Signature)

**Date:**

3/15/2013

Mary Ann Ogle

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### Program Comments:

The Manganese result is higher than historical values.

### Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with a Qualifier indicate a deviation from the method quality system or quality control requirement. The qualifier description is found at the end of the Certificate of Analysis (sample results) under the qualifiers heading. All results are reported on a dry weight basis unless otherwise noted. Subcontracted data included on the Duke Certificate of Analysis is to be used as information only. Certified vendor results can be found in the subcontracted lab final report. Duke Energy Analytical Laboratory subcontracts analyses to other vendor laboratories that have been qualified by Duke Energy to perform these analyses except where noted.

### Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

*Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)*

### Certification:

The Analytical Laboratory holds the following State Certifications : North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005. Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

## Sample ID's & Descriptions:

Sample ID	Plant/Station	Collection Date and Time	Collected By	Sample Description
2013004972	MIAMI-FORT	05-Mar-13 10:15 AM	ILLEGIBLE	OUTFALL 002
2013004973	MIAMI-FORT	05-Mar-13 9:12 AM	ILLEGIBLE	OUTFALL 608
2 Total Samples				

## Technical Validation Review

### Checklist:

COC and .pdf report are in agreement with sample totals and analyses (compliance programs and procedures).

☒ Yes

☐ No

All Results are less than the laboratory reporting limits.

☐ Yes

☒ No

All laboratory QA/QC requirements are acceptable.

☒ Yes

☐ No

### Report Sections Included:

☒ Job Summary Report

☒ Sample Identification

☒ Technical Validation of Data Package

☒ Analytical Laboratory Certificate of Analysis

☐ Analytical Laboratory QC Report

☐ Sub-contracted Laboratory Results

☐ Customer Specific Data Sheets, Reports, & Documentation

☐ Customer Database Entries

☒ Chain of Custody

☐ Electronic Data Deliverable (EDD) Sent Separately

Reviewed By: Mary Ann Ogle

Date: 3/15/2013

# Certificate of Laboratory Analysis

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*This report shall not be reproduced, except in full.*

Order # J13030033

Site: OUTFALL 002

Collection Date: 05-Mar-13 10:15 AM

Sample #: 2013004972

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<b><u>AMMONIA (COLORIMETRIC)</u></b>								
Ammonia (Colorimetric)	0.385	mg-N/L		0.02	1	EPA 350.1	03/12/2013 11:55	BGN9034
<b><u>TOTAL KJELDAHL NITROGEN (COLORIMETRIC)</u></b>								
Total Kjeldahl Nitrogen (Colorimetric)	0.80	mg-N/L		0.15	1	EPA 351.2	03/07/2013 12:14	BGN9034
<b><u>TOTAL DISSOLVED SOLIDS</u></b>								
TDS	760	mg/L		50	1	SM2540C	03/07/2013 15:30	SWILLI3

Site: OUTFALL 608

Collection Date: 05-Mar-13 9:12 AM

Sample #: 2013004973

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<b><u>ALKALINITY (FIXED END POINT 4.5)</u></b>								
Alkalinity (mg/L CaCO3)	2200	mg/L (CaCO3)		0.1	1	SM2320B	03/06/2013 15:58	SWILLI3
<b><u>INORGANIC IONS BY IC</u></b>								
Chloride	6800	mg/L		100	1000	EPA 300.0	03/12/2013 08:59	JAHERMA
Fluoride	24	mg/L		5	50	EPA 300.0	03/12/2013 08:59	JAHERMA
Sulfate	15000	mg/L		200	2000	EPA 300.0	03/12/2013 08:59	JAHERMA
<b><u>TOTAL METALS BY ICP</u></b>								
Boron (B)	572	mg/L		0.5	10	EPA 200.7	03/08/2013 14:58	DJSULL1
Iron (Fe)	0.123	mg/L		0.01	1	EPA 200.7	03/08/2013 14:58	DJSULL1
Manganese (Mn)	7.38	mg/L		0.005	1	EPA 200.7	03/08/2013 14:58	DJSULL1
<b><u>TOTAL RECOVERABLE METALS BY ICP-MS</u></b>								
Arsenic (As)	< 20	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
Barium (Ba)	117	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
Cadmium (Cd)	< 20	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
Chromium (Cr)	< 20	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
Copper (Cu)	< 20	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
Lead (Pb)	< 20	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
Zinc (Zn)	< 20	ug/L		20	1	EPA 200.8	03/11/2013 15:16	KRICAR
<b><u>TOTAL DISSOLVED SOLIDS</u></b>								
TDS	38000	mg/L		200	1	SM2540C	03/07/2013 15:30	SWILLI3
<b><u>TOTAL SUSPENDED SOLIDS</u></b>								
TSS	30	mg/L		5	1	SM2540D	03/08/2013 14:00	TJA7067



# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM



Duke Energy Analytical Laboratory

Mail Code MGO3A2 (Building 7405) 13339  
Hagers Ferry Rd  
Huntersville, N. C. 28078  
(704) 875-5245 4349 Fax: (704) 875-

Analytical Laboratory Use Only			
LIMS # J13030033	Sample Class NPDES	Samples Originating From	OH <input checked="" type="checkbox"/>
Logged By RA	Date & Time 3/4/13 1127	SAMPLE PROGRAM NPDES_X	
Vendor	3.3 Cooler Temp (C)		
PO #	16Preserv.:1=HCL 2=H <sub>2</sub> SO <sub>4</sub> 3=HNO <sub>3</sub> 4=Ice 5=None	4	4,2
MR #	16Analyses Required	3	4

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DISTRIBUTION  
ORIGINAL to LAB,  
COPY to CLIENT

1)Project Name MIAMI-FORT NPDES (SPLIT SAMPLE COOLER)	2)Phone No:
3)Client Sue Wallace, Tara Thomas, Matthew Hoyt	4)Fax No:
5)Business Unit:	6)Process:
7)Resp. Center To:	8)Project ID:
9)Activity ID:	10)Mail Code:

Customer to complete all appropriate non-shaded areas.

LAB USE ONLY
11Lab ID
2013004972
2013004973

12Chem Desktop No.	13Sample Description or ID	14Collection Information			17Comp.	18Grab	TDS	TKN, NH3	B, Fe, Mn, As, Ba, Cd, Cr, Cu, Pb, Zn	TSS	Cl, F, SO4	Alkalinity
		Date	Time	Signature								
	Outfall 002	3-5-13	10:15	[Signature]		X	2	2				
	Outfall 608	3-5-13	09:12	[Signature]		X	2		2	2	2	

Customer to sign & date below - fill out from left to right.

1) Relinquished By [Signature]	Date/Time 3-5-13 11:05	2) Accepted By COURIER	Date/Time 3/5/13
3) Relinquished By COURIER	Date/Time 3/6/13 1110	4) Accepted By [Signature]	Date/Time 3/6/13 1110
5) Relinquished By	Date/Time	6) Accepted By	Date/Time
7) Relinquished By	Date/Time	8) Accepted By	Date/Time
9) Seal/Locked By	Date/Time	10) Seal/Lock Opened By	Date/Time
11) Seal/Locked By	Date/Time	12) Seal/Lock Opened By	Date/Time

Customer, IMPORTANT!  
Please indicate desired turnaround.

22Requested Turnaround
14 Days _____
*7 Days _____
*48 Hr _____
*Other _____
* Add. Cost Will Apply

Comments: ICP-TOT - B, Fe, MN IMS-TRM - As, Ba, Cd, Cr, Cu, Pb, Zn TSS and TDS are 2 liter containers **FE HACH** = 0.30mg/L